

WHAT IS CLAIMED IS:

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1. A contactor used for testing an integrated circuit electronic component provided with a plurality of electrodes, said contactor comprising:

10      an insulating base material provided with holes formed at positions corresponding to said electrodes;

15      a first conductive layer having contacts which are plastically deformed portions of said first conductive layer, said contacts being provided at positions corresponding to said electrodes for enabling an electrical connection to said electronic component and being protruded from said insulating base material; and

20      reinforcement members provided on said contacts on a first surface of said contacts, said first surface being facing towards said holes.

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2. The contactor as claimed in claim 1, wherein said contacts are recessed into said insulating base material.

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3. The contactor as claimed in claim 1, wherein said contact has a top rim part surrounding an opening at the top of said contact.

4. The contactor as claimed in claim 1,  
wherein said contact has an irregular top part.

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10 5. The contactor as claimed in claim 1,  
wherein said insulating base material has reduced  
thickness at positions corresponding to said contacts.

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6. The contactor as claimed in claim 1 wherein  
said reinforcement members are leveled with said  
insulating base material.

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25 7. The contactor as claimed in claim 1 wherein  
said reinforcement members are protruded from said  
insulating base material.

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8. The contactor as claimed in claim 1 wherein  
said reinforcement members are plated members.

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9. The contactor as claimed in claim 1 further  
comprising a non-conductive layer covering said first

conductive layer except for positions corresponding to said contacts.

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10. The contactor as claimed in claim 1 further comprising a further plated member provided on said first conductive layer which may be in direct contact with said electrode.

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11. The contactor as claimed in claim 1 further comprising a second conductive layer provided on said insulating base material on an opposite side to said first conductive layer, the reinforcement member being provided so as to enable an electrical connection between said first conductive layer and said second conductive layer.

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12. A method of manufacturing a contactor used for testing an integrated circuit electronic component provided with a plurality of electrodes, said method comprising the steps of:

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a) preparing a wiring substrate having an insulating base material and a first conductive layer; and

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b) forming contacts by mechanically pressing said wiring substrate such that said first conductive layer is plastically deformed at positions corresponding to said electrodes.

13. The method as claimed in claim 12, wherein  
5 said step a) comprises the step of forming holes in  
said insulating base material at positions  
corresponding to said electrodes,  
and wherein said method further comprises  
the step of:  
10 c) providing reinforcement members on said  
contacts a first surface of said contacts, said first  
surface being facing towards said holes.

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14. A device for testing an integrated  
circuit electronic component provided with a plurality  
of electrodes using a contactor comprising:  
20 an insulating base material provided with  
holes formed at positions corresponding to said  
electrodes;  
a first conductive layer having contacts  
which are plastically deformed portions of said first  
25 conductive layer, said contacts being provided at  
positions corresponding to said electrodes for  
enabling an electrical connection to said electronic  
component and being protruded from said insulating  
base material; and  
30 reinforcement members provided on said  
contacts on a first surface of said contacts, said first  
surface being facing towards said holes.

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15. The device as claimed in claim 14, wherein

said contactor is positioned such that said contacts are protruded from said insulating base material towards said electronic component.

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16. The device as claimed in claim 14, wherein  
said contactor is positioned such that said contacts  
10 are recessed into said insulating base material away  
from said electronic component.

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17. The device as claimed in claim 14, wherein  
said contactor is positioned such that said first  
conductive layer is provided at a side opposite to said  
electronic component and said contacts are protruded  
20 from said insulating base material away from said  
electronic component.

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18. A method of testing an integrated circuit  
electronic component provided with a plurality of  
electrodes using a contactor comprising:

30 an insulating base material provided with  
holes formed at positions corresponding to said  
electrodes;

35 a first conductive layer having contacts  
which are plastically deformed portions of said first  
conductive layer, said contacts being provided at  
positions corresponding to said electrodes for  
enabling an electrical connection to said electronic  
component and being protruded from said insulating

base material; and

reinforcement members provided on said contacts on a first surface of said contacts, said first surface being facing towards said holes, said method comprising the step of:

a) electrically connecting said contacts of said contactor and said electrodes of said electronic component.

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19. The device as claimed in claim 18, wherein said contactor is positioned such that said contacts

15 are protruded from said insulating base material towards said electronic component.

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20. The device as claimed in claim 18, wherein said contactor is positioned such that said contacts are recessed into said insulating base material away from said electronic component.